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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,269	02/13/2002	Hiroki Konaka	401571	6817

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EXAMINER

NELSON, ALECIA DIANE

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/073,269

Applicant(s)

KONAKA ET AL.

Examiner

Alecia D. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) § ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. ***Claim 12*** recites the limitation, "said event handling editing means" in line 3 of the claim". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. **Claims 1-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukazawa et al. (U.S. Patent No. 5,371,683) in view of Petler (U.S. Patent No. 5,542,034)

With reference to **claims 1, 2, and 10**, Fukazawa teaches a LSI design support system for making a functional design of LSI using a graphic input method (see abstract); comprising state set editing means (1) for adding/deleting states of a composite display part having a plurality of states; event handling editing means (3) for describing event handling for a state transition in each of the states of the composite display part (9).

Fukazawa fails to specifically teach an elementary display part storing means for storing elementary display parts designed previously, however does teach the usage of the composite display part as explained above (see column 5, 42-48).

Petler teaches a storage memory element (12) and additional storage memory elements (13) which is used as determined by the current state of the finite state machine. Also, a next state logic block (11) determines the next values (15) for storage element (12) and storage element (13) using inputs (14) and registered output (17), which are the current values held in storage elements (12) and storage elements (13). The current state of the finite state machine is determined by registered outputs(17), wherein when more than one stat has the same combination of the values held in storage elements (12), there are a sufficient number of storage elements within storage elements (13) (see column 3, lines 2-20)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the memory elements, as taught by Petler in a device similar to that which is taught by Fukazawa so that each state has a unique combination of registered outputs.

With reference to **claims 3 and 4**, Fukazawa teaches that the state transition diagram preparation portion (1) has a function of editor and shows transitional relationships of operational states of the CPU, wherein the state transition diagram prepared by the state transition diagram preparation portion (1) is displayed on the picture plane in a form of multi-window (see column 5, lines 51-61).

With reference to **claim 5**, Fukazawa fails to teach the usage of the elementary display part, which is stored in the elementary display part storing means, has properties corresponding to size, position, external appearance and behavior, however does teach that the editorial function for alteration or modification includes addition, insertion and elimination of the condition signals and the condition values (see column 6, lines 25-31).

Petler teaches a storage memory element (12) and additional storage memory elements (13) which is used as determined by the current state of the finite state machine. Also, a next state logic block (11) determines the next values (15) for storage element (12) and storage element (13) using inputs (14) and registered output (17), which are the current values held in storage elements (12) and storage elements (13).

The current state of the finite state machine is determined by registered outputs(17), wherein when more than one stat has the same combination of the values held in storage elements (12), there are a sufficient number of storage elements within storage elements (13) (see column 3, lines 2-20)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the memory elements, as taught by Petler in a device similar to that which is taught by Fukazawa so that each state has a unique combination of registered outputs.

With reference to **claims 6**, Fukazawa teaches a composite display part property setting means which adds/deletes the properties representative of behaviors of the composite display part, wherein the property editing means edits the properties of the composite display part added to each state (see column 6, line 36-60).

With reference to **claim 7**, Fukazawa fails to specifically teach the property editing means (3) is arranged to describe the properties of the display part, or the composite display part by referencing values of the properties of another display parts (see column 6, lines 36-60).

Fukazawa fails to specifically teach the elementary display part however this is explained above with reference to the teachings of Petler.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of the memory elements, as taught by Petler in

a device similar to that which is taught by Fukazawa so that each state machine that is capable of describing the properties of the display part in order to provide a system which allows facile function and reduce the design term.

With reference to **claims 8 and 9**, Fukazawa teaches that the state display editing means displays, graphically, disposition of the display part while editing properties and information concerning layout, such as size or dimension through direct manipulateion with an input device (see column 45-51). With further reference to claim 9, editing is carried out by activating one of the property editing means (see column 6, lines 28-32).

With reference to **claim 11**, Fukazawa teaches a virtual display part storing means for storing virtual display parts having functions realized virtually by the simulation means (see column 12, line 55-column 13, line 11).

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is (703)305-0143. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on (703)305-9720. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

adn/ADN
October 1, 2003

A handwritten signature in black ink, appearing to read 'Steven Saras', is written over a faint, larger signature.

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600